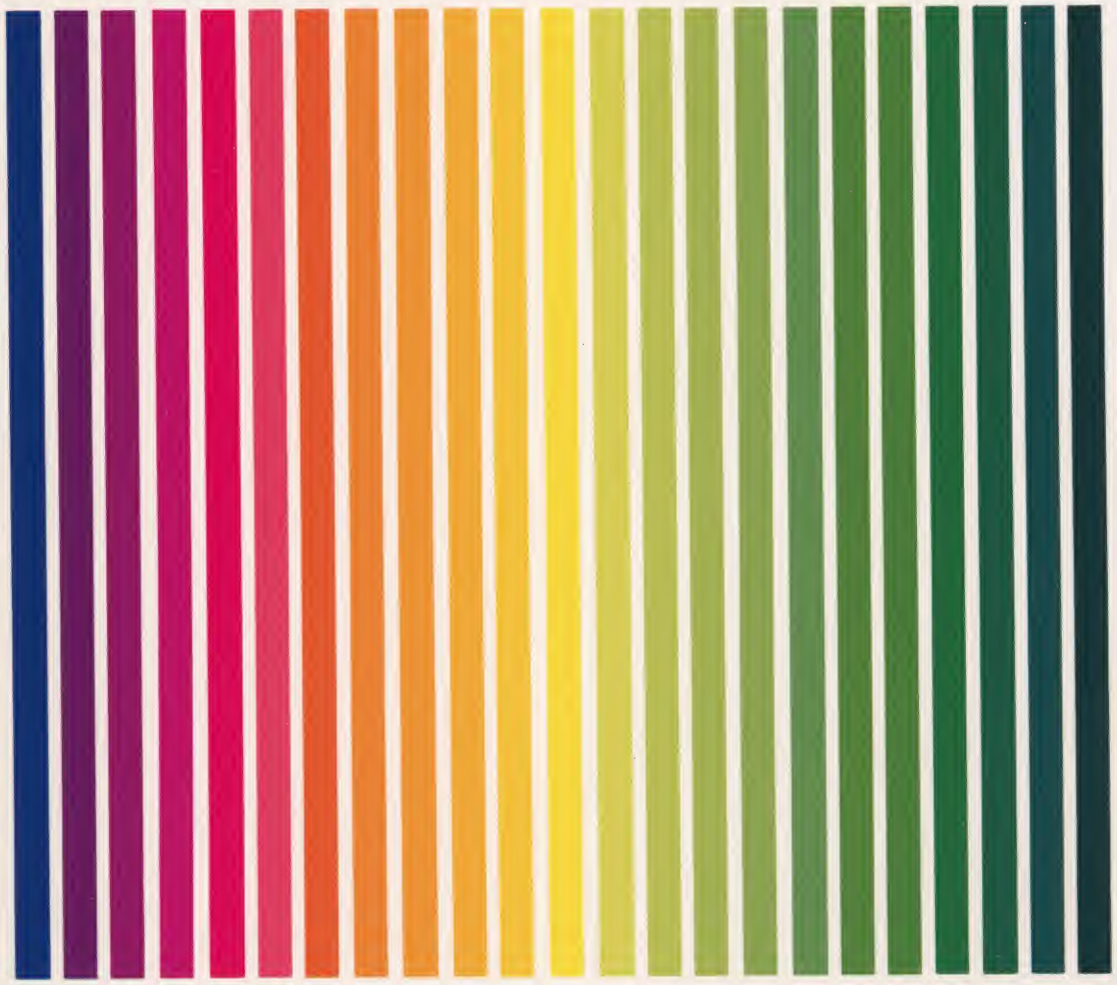
APX ATARI® PROGRAM EXCHANGE



ATARI PROGRAM-TEXT EDITOR™

APX-20075

User-Written Software for ATARI Home Computers

ATARI PROGRAM-TEXT EDITOR™

APX-20075

ATARI PROGRAM-TEXT EDITOR™

PRINTED IN U.S.A.

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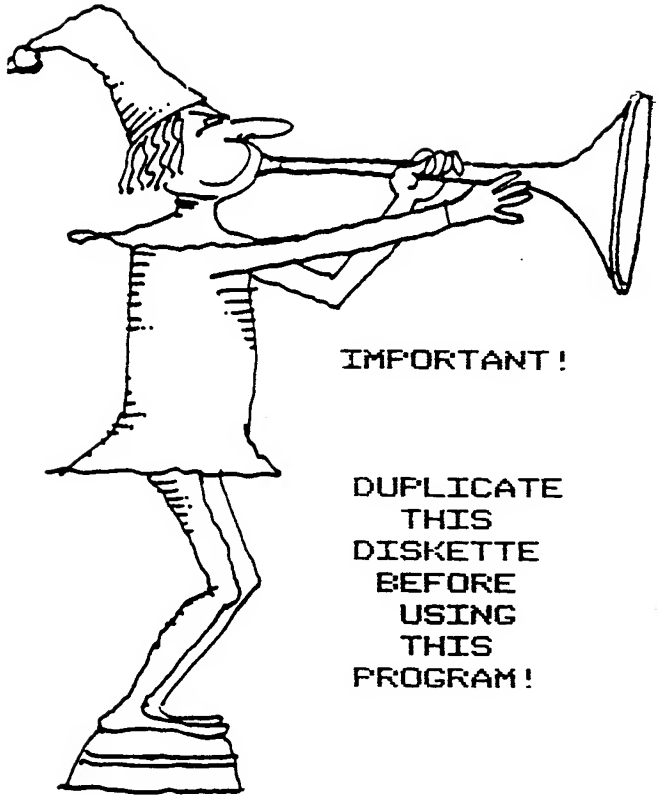

This APX diskette is unnotched to protect the software against accidental erasure. However, this protection also prevents a program from storing information on the diskette. The program you've purchased involves storing information. Therefore, before you can use the program, you must duplicate the contents of the diskette onto a notched diskette that doesn't have a write-protect tab covering the notch.

To duplicate the diskette, call the Disk Operating System (DOS) menu and select option J, Duplicate Disk. You can use this option with a single disk drive by manually swapping source (the APX diskette) and destination (a notched diskette) until the duplication process is complete. You can also use this option with multiple disk drive systems by inserting source and destination diskettes in two separate drives and letting the duplication process proceed automatically. (Note. This option copies sector by sector. Therefore, when the duplication is complete, any files previously stored on the destination diskette will have been destroyed.)

PREFACE

Your Program-Text Editor is a versatile tool. You can use it to edit source programs written in various programming languages. The addition of a printer and a pertinent software package to your system will make the editor an effective word processor.

Introductory sections of this manual supply simple instructions for diskette operations as well as rudimentary editing functions. Advanced and specialized editing techniques are treated factually. The error messages displayed on the back cover and the enclosed reference card provide quick and easy fingertip access to information.

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SYSTEM REQUIREMENTS

The ATARI® **Program-Text Editor™** (Model No. CX8121) requires:

- **ATARI 810™ Disk Drive**
- ATARI Blank Diskette (CX8100)

For information on your disk drive, refer to the *ATARI 810 Disk Drive Operators Manual*. Check the drive code setting to make certain that you have a disk drive designated as Drive 1. Because the Disk Operating System (DOS) II programs are included on the diskette containing the Program-Text Editor, you can easily load the editor software by inserting your diskette in Drive 1. Otherwise, you must have a copy of the DOS II Master Diskette, Model No. CX8101, inserted into Drive 1.

You must have at least 24K RAM in your ATARI Home Computer to operate the disk drive and the editor software. Although the software requires 24K memory, a total memory capacity of 32K is highly recommended and will result in increased program efficiency. For instructions on inserting additional **ATARI RAM Memory Modules™** into the **ATARI 800™ Computer**, refer to the *ATARI 800 Operators Manual*.

SETUP PROCEDURES

1. Verify that all power switches (console **and** disk drive) are turned to OFF.
2. Check that the computer console is properly connected to the television set and a standard wall outlet.
3. Place the disk drive at least 12 inches away from your television set and plug it into a standard wall outlet.
4. Connect the disk drive to either the computer console or another ATARI peripheral. Plug one end of the I/O Data Cord into the jack labeled I/O CONNECTORS on the back of the disk drive. Plug the other end into either the jack labeled PERIPHERAL on the computer console or one of the I/O CONNECTOR ports of another ATARI peripheral. If you connect your disk drive to another ATARI peripheral, verify that there is an I/O Data Cord plugged into the computer console.

TURNING ON THE SYSTEM

When you are ready to use the computer, proceed as follows:

1. Turn on the television set. Tune to Channel 2 or Channel 3, whichever has a weaker signal in your area. Make certain that the 2-CHAN.-3 switch on the computer console corresponds to your channel selection.

2. Turn on the disk drive. Notice that the BUSY and PWR ON light indicators are activated. Wait until the motor of the disk drive stops its activity and the BUSY light goes out before continuing to the next step.

3. Insert the diskette containing the Program-Text Editor into the disk drive designated as Drive 1.

   Note: DO NOT TOUCH THE EXPOSED PORTION OF THE DISKETTE.

4. Turn the computer console power switch to ON. This will activate the disk drive's loading procedure.

Note: *OPTIONAL*. To increase the RAM buffer size on a 48K system, before turning on your computer, remove any language cartridge that might be installed.

Take note of the following conditions to determine if you have successfully completed the power-on procedure. If you have a language cartridge inserted into the computer console, the screen displays the prompt applicable to that particular language. For example, the ATARI BASIC language prompt is the READY message; the ASSEMBLER EDITOR language prompt is the EDIT message. Otherwise, the DOS Menu should appear immediately upon the screen.

TURNING OFF THE SYSTEM

Warning: NEVER turn off the disk drive with a diskette in it. You may damage the information contained on the diskette and lose the ability to load your program.

When you are ready to end your editing session:

1. Use the exit command appropriate for your editing session.

2. Wait for the DOS II Menu display or the filename prompt to appear on the screen.

3. Remove the diskette from the disk drive and return it to the protective sleeve that was provided with the software.

4. You may turn off the television set, the computer, or the disk drive in any order.

2

OPERATIONAL PROCEDURES FOR THE EDITOR

You must load the editor through the DOS Menu. If the DOS Menu is not already displayed on your screen, type **DOS** and press RETURN. Refer to Figure 1. (The *DOS II Reference Manual* contains complete instructions for using the DOS II Menu options.)

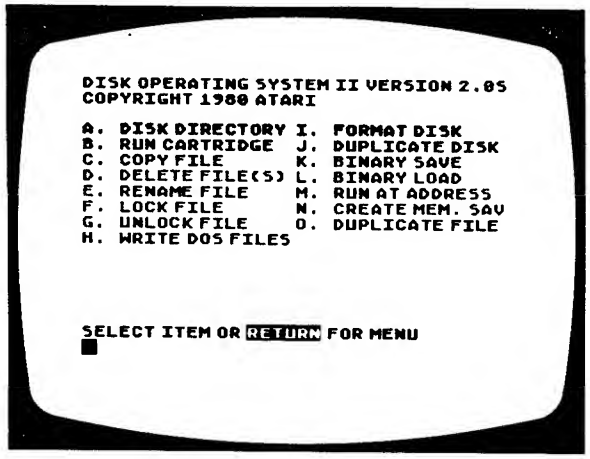


Figure 1 DOS II Menu

Because the editor program is included on a diskette that has been factory write-protected for software safety, you must prepare a diskette for your text files. For identification purposes, we refer to this diskette as a "data" diskette. With the DOS Menu displayed on the screen, remove the diskette containing the Program-Text Editor software. Refer to the *DOS II Reference Manual*. Format a blank diskette, then write new DOS files to it. Remove this diskette and reinsert the editor program diskette.

Select the L-BINARY LOAD command. Answer the prompt, LOAD FROM WHAT FILE, with the name of the Program-Text Editor software, **MEDIT**. The program will automatically run after being loaded. Refer to Figure 2. Insert your data diskette into the disk drive at this time.

Caution: You may **not** change your data diskette once the editing session is started. Because the editor has built-in memory checks and free space allocation computations, a memory map of the diskette inserted at the time the editor performs its check is always retained. Therefore, even though the editor's workspace resides in RAM, the block-write command can result in an overwrite situation on any but the original diskette.

Note: Because the editor performs a free IOCB (Input/Output Control Block) check, you may receive the error message EDITOR CANNOT RUN - NO FREE IOCBs. PRESS START to return to DOS. Refer to the *ATARI Operating System Manual* (part number CO16555) for complete information on IOCBs and to the error messages on the back cover for an explanation of this condition.

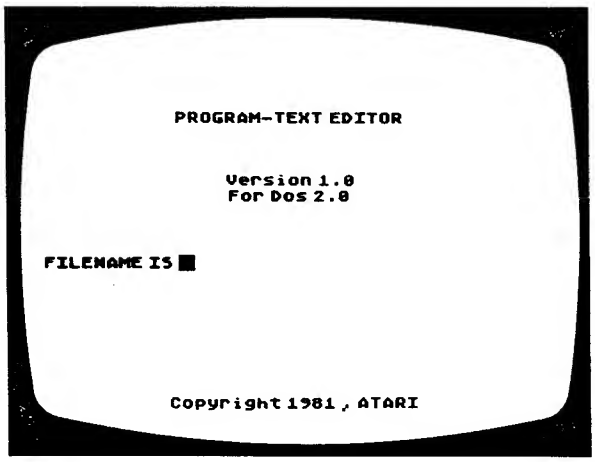


Figure 2 Filename Prompt

Your Program-Text Editor is now ready to bring the file that you wish to edit into its workspace. At this point, there are several options available:

- Press the BREAK key to end the edit session and return control to DOS.
- Enter the filename of the program that you wish to edit.
- Create a new file under the editor by naming a file that does not exist. The editor will automatically create an empty file using the specified name.

The correct syntax for an acceptable filename is in the form:

D*n*:filename.extension,optional parameters separated by commas.

Example: D4:MYFILE.MAC,3,.ASM,D

The drive number ***n*** designation corresponds to the disk drive that contains your source program and must be between the numeric characters of one and eight. You may use a filename of from one to eight characters, either alpha characters A through Z or numeric characters 0 through 9.

Note: For a filename specification, an alpha character must be in the first character position. This rule does not apply to filename extensions.

Your optional extension may be from one to three characters long, using either alpha or numeric characters.

Remember the following specifications when answering the filename prompt.

- If no device is specified, the editor automatically assumes the use of the disk drive designated as Drive 1.
- Lowercase file specifications automatically convert to the correct uppercase syntax.
- If the file, its associated backup file, or its temporary file is locked (see the "Theory of Operation" section for further explanation), the editor displays the error message FILE LOCKED and reissues the filename prompt. Unlock any of these files through use of the DOS Menu. Refer to the *ATARI DOS II Reference Manual.*

Optional parameters may be entered in any order after the file specification:

,n OVERRIDE DESTINATION DRIVE. Unless otherwise specified, the default destination drive is the one on which the source file is located. You may move the destination file from the default drive by using this parameter. The value ***n*** is a numeric digit corresponding to the number of the destination disk drive.

Example: MYFILE,2

When you have more than one disk drive, use this optional parameter to edit large files or when there is not enough free space on the source diskette to allow you to save the edited file.

,D DELETE BACKUP FILE FLAG. If a backup file exists, this parameter tells the editor to erase it before beginning the editing session. Use of this parameter allocates free space at the cost of backup file protection.

Example: MYFILE,D

Note: If the source and destination drive are not the same, the editor automatically deletes a file with the same name on the destination drive.

,.ext OVERRIDE CUSTOMIZING FILE. Use of this parameter causes the editor to use the customizing file associated with the designated extension file. Unless this parameter is assigned, the editor defaults to use of the extension associated with the file specification being edited.

Example: MYFILE,.PAS
MYFILE,.ASM
MYFILE,.BAS

Following are additional examples of valid filename prompt responses.

```
MYFILE
MYFILE.PAS
D3:MYFILE
D3:MYFILE,2
MYFILE.PAS,D,4
D2:MYFILE,.PAS,D,3
MYFILE,.ASM
d2:myfile,.pas,d,3
D4:MYFILE.BAS,3,.PAS,D
```

After receiving the filename specification, your Program-Text Editor checks the free space on the destination diskette and makes a comparison with the size of the file to edit. A minimum growth factor, considering the expansion of file storage capacity requirements because of additions or modifications, of **g** units is ascertained. (See the "Customizing the Editor" section.) If there is not enough room on the diskette for the edit file and the growth factor, the editor displays a warning message. You may choose to ignore the warning and continue with the editing session. Or you may abort the edit, exit from the editor, and return to the DOS Menu. If the editor determines that there is enough room on the diskette for the edit file and growth factor, the edit session begins.

Caution: If you ignore the warning message, be sure that you have as much free space as the size of your existing file plus room for any additions you will make during the editing session. If your calculations are not correct and you run out of free space on the diskette, you may lose all work completed in the current editing session.

Note: A minimum growth factor of **g** units is determined from the customizing file. If default factors are used, the minimum growth factor is 100 sectors of free space.

THEORY OF OPERATION

For efficiency and optimum protection, the Program-Text Editor uses a common **two-file** editing method. During the editing session, the original file remains intact while all modifications are made to a copy of the file. Therefore, this procedure allows for:

- Automatic backup copies of files to be edited
- Modification of the original file **only** after the editing session is terminated with a normal exit from the editor
- Use of sequential file access

A procedural outline of the two-file method is:

- Text is copied from the file to be edited into a memory buffer.
- When the buffer becomes full, data transfers to a **temporary** file.

Normal exit (Figure 3) from the editor causes the following sequence:

- The .BAK file is deleted.
- The edited file is renamed as the new .BAK file.
- The temporary file is renamed as the edited file.

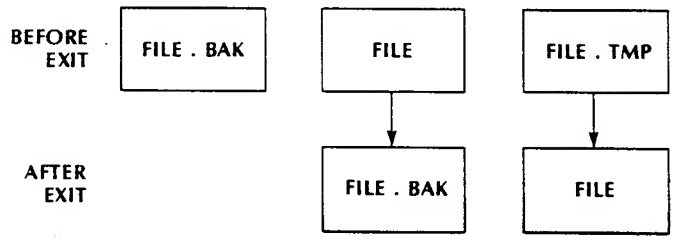


Figure 3 Normal Exit From the Editor

An abort exit (Figure 4) from the editor causes the following sequence:

- The temporary file is deleted.
- The original edited file and the .BAK file retain their integrity.

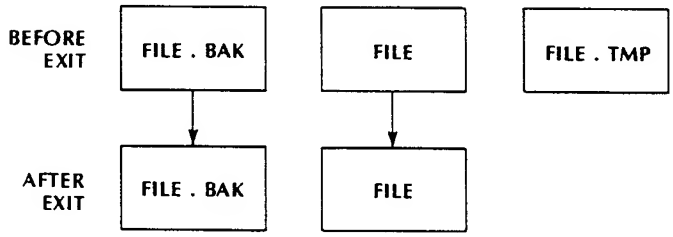


Figure 4 Abort Exit From the Editor

Your Program-Text Editor uses two modes of operation: immediate and command. Immediate mode operation is keyboard interactive. Command mode operation defers to a later time execution. All three windows and both operation modes are discussed at length in subsequent sections of this manual.

The Program-Text Editor is defined as a **source file editor**. A source file is a disk file consisting of ATASCII characters terminated by ATASCII EOLs (End-of-Line). Therefore, the editor functions with files containing the source code written for ATARI Computer programming languages. A line length default value of 114 columns can be changed to a maximum length of 200 columns by using the customizing file feature (see section titled "Customizing the Editor").

Two types of tabs are allowed: (1) regular tabulation as provided by the operating system in which blanks are substituted between tab stops or (2) expanding tabs. Expanding tabs only take one character in the file but are displayed as many columns of blanks. Set the type of tab by using the customizing file.

```
LINE OF TEXT-35 CHARACTERS
     LINE OF TEXT
     LINE OF TEXT
```

5 character displacement = 5 bytes of memory
using default value of 5, inserting blanks like the operating system

```
LINE OF TEXT-35 CHARACTERS
▶....LINE OF TEXT
▶....LINE OF TEXT
```

5 character displacement = 1 byte of memory
using expanding tabs

Figure 5 Illustration of Expanding Tabs

If you attempt to edit a file that does not meet source file definitions and customizing column limits, the editor truncates the lines in the file to conform to the set line length limits. Given this situation, the editor generates the LINE TOO LONG error message while reading the file either during initial entry to the editor or as an input command.

STARTING THE EDIT SESSION

Answer the filename prompt. For the purposes of demonstration, enter the filename **PRACTICE**. Refer to Figure 6.

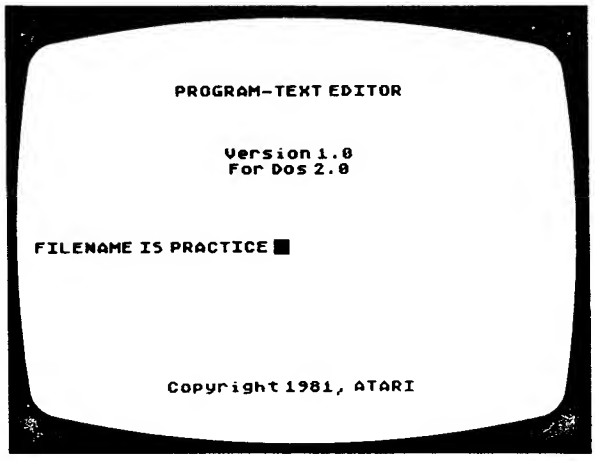


Figure 6 Answering the Filename Prompt

Notice the three windows displayed on the screen:

TEXT WINDOW	Appears at the top of the screen and consists of 20 lines.
ERROR WINDOW	Appears in inverse video and consists of a single line.
COMMAND WINDOW	Appears at the bottom of the screen and consists of three lines.

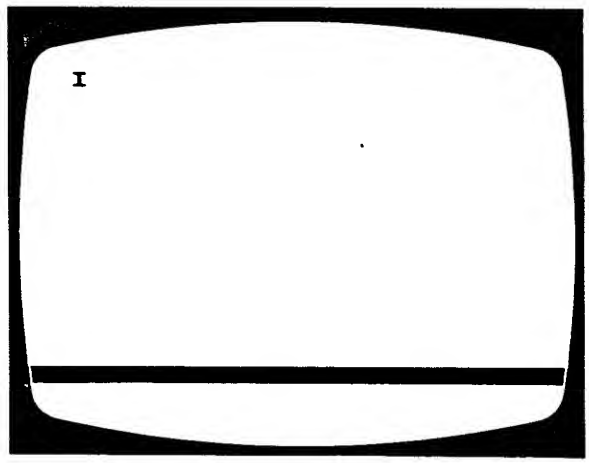
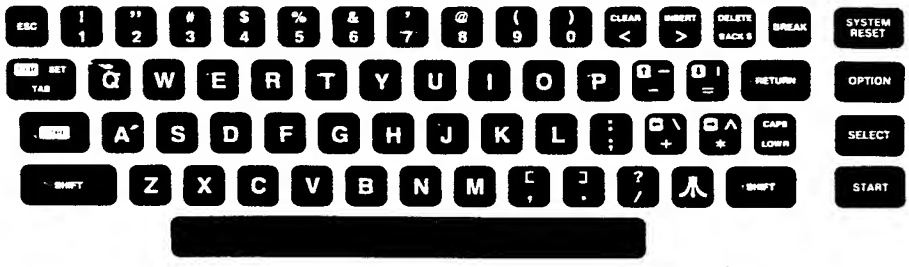


Figure 7 Windows

FAMILIARITY WITH THE KEYBOARD

A summary of the immediate keystroke commands appears at the end of this section.



From the keyboard shown above, locate the following specific keys: CTRL, SHIFT, DELETE BACK S, CLEAR. Note that there are keys indicating directional arrows as well as arithmetic operators. Some keys serve a dual purpose, for example, the DELETE BACK S. As the operation of the SHIFT key on the computer keyboard is the same as the shift key of a typewriter, its use will select the function that appears on the top of the key.

Enter the following text onto your screen:

AND HERE WE SEE THE INVISIBLE BOY RETURN
IN HIS LOVELY INVISIBLE HOUSE, RETURN
FEEDING A PIECE OF INVISIBLE CHEESE RETURN
TO HIS LITTLE INVISIBLE MOUSE. RETURN

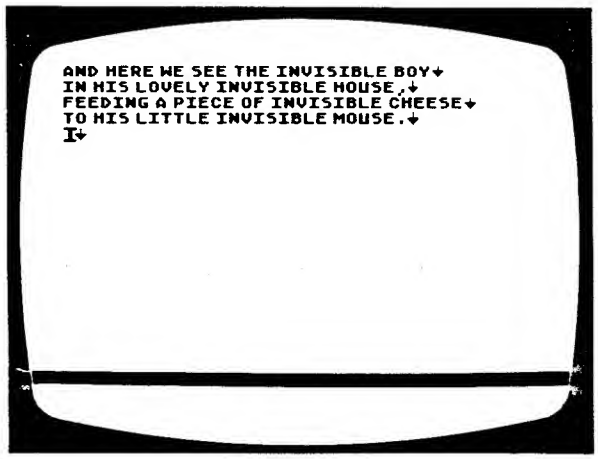


Figure 8 Example of Entered Text

After entering the lines, notice the following: every time you press the RETURN key, an ↓ appears on the screen. This figure indicates the carriage return action. Also, pay particular attention to the movement of the cursor. During execution of the keystroke entry, the cursor position indicates character placement by appearing immediately in front of the next entry. After any keystroke, the text window is updated to reflect the current state of the file, and the cursor moves accordingly. Look again at the above screen diagram and note the cursor positioning.

Using the table below, manipulate the cursor within your displayed text.

Keystroke	Explanation
CTRL ←	Moves cursor left
CTRL →	Moves cursor right
CTRL ↓	Moves cursor down one physical line
CTRL ↑	Moves cursor up one physical line
CTRL 2	Moves cursor to beginning of logical line
CTRL 3	Moves cursor to end of logical line

After you feel thoroughly acquainted with the movement produced by striking these keys, follow the procedure outlined below:

Position the cursor on the "A" of the first word in the first line of your text. Use the CTRL ← keystroke. Now use the CTRL ↑ keystroke. Note that both of these operations result in the warning message CURSOR AT END. The same error message will be displayed if you use a CTRL → if the cursor is in the far right position at the end of text.

Note: When the cursor moves up and down a slight glitter of the screen may occur. Also, on occasion, you may notice the appearance of an additional line below the command window. These are normal operating conditions.

Notice that these cursor-movement keystrokes position the cursor but do not affect the entered text. Within the immediate mode operation, there are essentially two types of keystrokes: those that directly relate to cursor positioning and those that execute a change to the text itself. You must position the cursor at a precise point using the above key combinations. Refer to the table below for those keystrokes that will immediately edit entered text.

Keystroke	Explanation
SHIFT INSERT	Inserts a blank line above the current logical line
DELETE BACK S	Deletes character left of cursor
CTRL DELETE BACK S	Deletes character right of cursor
SHIFT DELETE BACK S	Deletes the logical line occupied by cursor
Regular keys	Insert character into text

Within the framework of this software and as a matter of convention, this manual introduces the terms ***logical line*** and ***physical line***. A logical line contains those characters entered between carriage returns. A physical line encompasses those characters contained in a straight line from the extreme left side to the extreme right side position of your television screen. A logical line can be one or more physical lines.

Return to your screen. You must use your cursor control keys to move your cursor during an edit session. Position the cursor so that it is over the "v" in the word "invisible." Use the DELETE BACK S key twice. (**Do not** press RETURN. Pressing the RETURN key at any time will introduce a carriage return figure, ↓ into your text.)

Take note of several unique conditions that might arise from operation of the DELETE BACK S and CTRL DELETE BACK S keys.

If the cursor is to the right of a carriage return, use either the DELETE BACK S key or the CTRL ← key to reposition the cursor. However, when the cursor is to the immediate right of a carriage return, use of the DELETE BACK S key deletes the carriage return itself. Similarly, if the cursor is to the left of a carriage return, use of the CTRL DELETE BACK S key repositions the cursor exactly as use of the CTRL → key. However, when the cursor is to the immediate left of a carriage return, use of the CTRL DELETE BACK S key removes the carriage return itself. Concatenation follows the carriage return deletion. If the maximum line length is exceeded, the editor:

- Restores the deleted carriage return
- Aborts the command line
- Displays the error message LINE TOO LONG
- Returns to immediate mode operation

Other specific conditions that result when the cursor is positioned:

Within an expanding tab	Use of either keystroke deletes the entire tab.
At the beginning of the buffer	Use of the DELETE BACK S key results in no operation and generates the error CURSOR AT END.
Above the text window	Use of the DELETE BACK S key causes an automatic scroll that pulls down the previous line.
At the end of the buffer	Use of the CTRL DELETE BACK S key results in no operation and generates the error CURSOR AT END.

Note: Attempted deletion of the last carriage return in the buffer is illegal and results in the CURSOR AT END error message. Use a delete line operation to successfully remove this last carriage return.

Follow the same procedure to acquaint yourself with the use of the other keystrokes outlined in the table. Use cursor control keystrokes to position the cursor. Select the appropriate key to accomplish the desired change. Use cursor control keystrokes to remove the cursor from the logical line.

On the ATARI Computer keyboard, locate the ESC key. Use this key in conjunction with control graphics keys to print specific graphics characters. Refer to Figure 9 for keystroke combinations to produce a chosen graphics display.

Press the ESC key and then press:		to get
	ESC	E
	DELETE BACK S	◀
	CLR SET TAB	▶
Press the ESC key and then press the CTRL key simultaneously with:		to get
	; :	▲
	= +	▼
	* ^	▶
	+ \	◀
	< CLEAR	↖
	DELETE BACK S	◀
	> INSERT	▶
	CLR SET TAB	◀
	2 "	↖
Press the ESC key and then press the SHIFT key simultaneously with:		to get
	DELETE BACK S	▲
	INSERT >	▼
	CLR SET TAB	▶

Figure 9 Escape Sequence Characters

If the cursor is within an expanding tab or to the right of a carriage return when a character is inserted into text, the editor automatically repositions the tab or carriage return to the right of the cursor.

Additional cursor movement keystrokes:

Keystroke	Explanation
CTRL 8	Displays previous screen
CTRL 9	Displays next screen

Use the keystrokes above to respectively display either 20 physical lines above or below the text window. Additional reserved keystrokes include:

Keystroke	Explanation
CLEAR SET TAB	Tabs to next tab stop
CTRL RETURN	Returns and auto-indents to same level
CTRL CLR SET TAB	Toggles visible-tab mode
SHIFT CLR SET TAB	Toggles visible-carriage return mode

Use the CLR SET TAB key to position the cursor. Space tabs insert a selected number of blanks between tab stops, and the cursor positions itself accordingly. Expanding tabs, however, insert a character into the text that indicates the tab function. By using the customizing file, you can display the expanding tab character as either blanks or a right triangle followed by periods. Set your default choice within the parameters of the customizing file. If you have chosen the expanding tab option, use the CTRL CLR SET TAB immediate mode keystroke command to display the alternate character choice.

Carriage returns can be displayed as blanks or down-arrows. Default choice is set within the parameters of the customizing file. Use the SHIFT CLR SET TAB immediate mode keystroke to display the alternate character choice.

Auto-indention allows you to reposition the cursor to return to an automatic tab stop on the next logical line. Press the CTRL and RETURN keys simultaneously. The indention of the logical line containing the cursor determines the position of the automatic tab.

Keystroke	Command
CTRL CLEAR	Erases the error window
START	Executes command window
SELECT	Selects the alternate command line
OPTION	Changes mode
BREAK	Aborts command being executed

Error messages displayed within the error window are cleared in three ways:

- Pressing the CTRL CLEAR keys will clear the error.
- If a syntax error occurs, the window clears when the command is corrected.
- After four seconds of elapsed time, the error window automatically clears with any keystroke entry.

Use the OPTION key to change operation modes. In immediate mode operation, use of OPTION enters command mode. Switching these operation modes automatically clears the current command window. To avoid this erasure, use the SHIFT OPTION combination keystroke. The current command line remains intact, and the cursor positions itself at the end of the command line.

Within the command mode, all keystrokes enter text into the command window. All immediate and reserved keystrokes, with the exception of DELETE BACK S, can still be executed. Use of the DELETE BACK S key deletes the last character typed into the command window. Pressing OPTION twice while in command mode deletes the entire command line.

During execution of the command window, the editor is in command mode. Notice that the cursor remains in the command window while the command is being executed. After successful completion of the command execution, the cursor disappears from the command window and the editor returns to immediate mode operation. Use the SELECT key to rotate displays of the command line and any alternate entry. Touch the BREAK key during execution of the command line to discontinue processing. As soon as the current command execution is completed, a BREAK KEY ABORT message appears in the error window, and the editor returns to immediate mode operation. Touching BREAK at any other time has no effect.

In command mode, the use of OPTION returns control to immediate mode. The command line remains in the command window for later execution. Use the START key to execute commands within the command window. A NOT COMPLETE error message results when a command contains a syntax error. The editor remains in command mode so that correction can be made. Executing a blank command or an empty display window returns control to immediate mode.

COMMAND MODE OPERATION

The command window accepts and displays all keystroke entries made in command mode operation. With the exception of the DELETE BACK S key, all immediate reserved keystrokes function identically within either operation mode. The command window is three physical lines long and allows a single command line that is made up of one or more commands. You may enter spaces between commands for better readability, and use either upper- or lowercase. Within the command window, a carriage return is displayed as the inverse E escape sequence character. A mini-interpreter checks each keystroke for valid syntax. The following syntax error messages may be displayed:

- UNRECOGNIZED COMMAND
- DELIMITER ERROR
- NUMBER TOO BIG

If a syntax error occurs, the editor ignores all keystrokes until you delete the offending character from the command window. Manipulation of the command window is as follows:

- OPTION key returns the editor to immediate mode operation.
- OPTION key pressed twice erases the entire command window.
- DELETE BACK S key deletes the last character entered into the command window.
- START key executes the command line if the syntax is correct and complete.
- SELECT key swaps the command line displayed in the command window with an alternate command line.

After execution of the command line, the editor returns to immediate mode operation. The command line is not erased and may be reexecuted by pressing START.

EXITING THE EDITOR

Depending upon your desired end result, choose one of the following options to exit from the editor:

Command	Explanation
EXIT	Use this command to exit from the editor and return to DOS. All changes made during the edit session are retained.
EXIT2	Use this command to exit from and restart the editor. In effect, this command duplicates the action of EXIT followed by the DOS "L" (load) command, and you will receive the editor sign-on filename prompt.
ABORT	Use this command to exit from the editor without incorporating any changes made during the edit session and return control to DOS.
ABORT2	Use this command to exit without incorporating any changes made during the edit session and restart the editor. In effect, this command duplicates the action of ABORT and DOS "L" (load) commands. You will receive the editor sign-on filename prompt.
REOPEN	Use this command to exit from the editor and automatically reenter the same file. In effect, this command duplicates the action of EXIT2 and answering the filename prompt with the specification of the file you are editing. See "Specialized Commands" within this section for specific details.

Note: The editor accepts the exiting commands in the form EXIT***n*** and ABORT***n*** as valid syntax. However, at execution time, the error message NUMBER TOO BIG is generated if ***n*** is greater than 2.

CURSOR MOVEMENT COMMANDS

You may manipulate the cursor through command mode operation. This method lets you quickly move the cursor to where you want it. To use the following table effectively, you must be familiar with two terms: ***buffer*** and ***file***. In this particular software application, text is copied from the file to be edited into a memory buffer where modification is achieved. When the memory buffer becomes full, it is written to a temporary file. This process is repeated continuously until all text has been copied from the edited file into a temporary file. As you can determine, the contents of the edited file and the memory buffer can differ.

Note: Take care in planning your editing session. You cannot easily edit the portion of the file that has been written out of the buffer. Make your modifications from the beginning to the end of the file. To edit a part of the file that has already been written out of the buffer, use the REOPEN command (see "Specialized Commands" contained within this section) or reenter the editor. Both of these methods require lengthy disk access.

Command	Explanation
CL***n***	Moves cursor left ***n*** characters
CR***n***	Moves cursor right ***n*** characters
CU***n***	Moves cursor up ***n*** logical lines
CD***n***	Moves cursor down ***n*** logical lines
CBB	Moves cursor to beginning of buffer
CEB	Moves cursor to end of buffer
CBF	Moves cursor to beginning of file
CEF	Moves cursor to end of file
CBL	Moves cursor to beginning of the logical line
CEL	Moves cursor to end of the logical line
CC***n***	Moves cursor to column ***n*** (range 1-200)

Note: The notation ***n*** signifies an optional numeric argument, which usually acts as a repeat counter, with a range of 1-65535. With the exception of margin values, if ***n*** is omitted, the editor assumes a value of 1.

The error message CURSOR AT END is generated each time you attempt to position the cursor:

- Left, before the beginning of the buffer
- Right, past the end of the buffer
- Up, before the beginning of the buffer
- Down, past the end of the buffer

Note: Each time the editor generates this error message, it aborts the command line and enters immediate mode operation.

Use the cursor control movements to position the cursor at strategic locations to implement the more sophisticated commands available in the editor.

SEARCH COMMANDS

In the following commands, delimiters must be used to separate the string from the search command notation. You may either use the slash mark, /, or a set of quotation marks as delimiter characters. As an example, the SB/-/*n* command explained below can also be entered as SB"-"*n*. You can use "wild cards" as a substitution for characters in a search string. The editor recognizes the inverse video question mark [?] as a wild card that will match any character while searching. (To display any inverse video characters from the ATARI 800 keyboard, use the [A] key.)

Command	Explanation
SB/-/*n*	Search for *n*th occurrence of string in buffer
SF/-/*n*	Search for *n*th occurrence of string in file
SRB/-/-/*n*	Search and replace *n* times in buffer
SRF/-/-/*n*	Search and replace *n* times in file
SRVB/-/-/*n*	Search and replace with verify *n* times in buffer
SRVF/-/-/*n*	Search and replace with verify *n* times in file

Note: The notation *n* signifies an optional numeric argument, which usually acts as a repeat counter, with a range of 1-65535. With the exception of margin values, if *n* is omitted, the editor assumes a value of 1.

In general, all string searches begin after the current cursor location. In successful file and buffer searches, the cursor is positioned after the *n*th occurrence of the string. The logical line containing the cursor is displayed as the first line of the text window.

In unsuccessful buffer searches, the editor:

- Retains the cursor in its original position
- Generates a SEARCH FAILED error message
- Aborts the command line
- Returns to immediate mode operation

In unsuccessful file searches, the editor repeatedly writes out the current buffer and reads a new buffer. If the end-of-file is reached before finding the *n*th occurrence of the string, the search fails. Then, the editor:

- Retains the cursor in its original position **if** the last line in the file was already in the buffer before the search began **or**
- Positions the cursor to the beginning of the last buffer read **if** new lines were introduced from the file to the buffer area
- Follows the same procedure outlined above for unsuccessful buffer searches

In general, the **search and replace** commands, perform a search for the first string and replace it with the designated second string for the specified ***n*** times. The replacement string may be null or have a different amount of characters than the search string. Care should be taken to avoid the following conditions resulting in error messages. As with all error conditions, the editor aborts the command line and returns to immediate mode operation.

LINE TOO LONG	Could result if the insertion of a large replacement string into a text line exceeds the maximum line length. Result of Operation: Only the first part of the replacement string would be inserted into the text.
LINE TOO LONG	Could result if the search string contains carriage returns. When a carriage return is deleted and the lines are concatenated, the resulting new line could exceed the maximum line length. Result of Operation: The cursor is located to the right of a partial search string and that logical line is displayed as the first line of the text window.
CURSOR AT END	Could result if the search string terminates with a carriage return and is found on the last line of the buffer. Because the editor does not allow the last carriage return in the buffer to be deleted (except with a delete-line command), this search results in the given error message. Result of Operation: The editor will find the string but abort the command line, resulting in no replacement.

In unsuccessful buffer searches, the editor:

- Retains the cursor in its original position if no replacement has been made **or**
- Positions the cursor after the last successful replacement **and**

  - generates a SEARCH FAILED error message
  - aborts the command line
  - returns to immediate mode operation

In unsuccessful file searches, the editor repeatedly writes out the current buffer and reads in a new one. If the end-of-file is found before the ***n***th occurrence of the search string, the command fails. Then, the editor follows the same procedure as outlined above for unsuccessful buffer searches.

Search and replace with verify commands for buffer and file use the same procedure as those respective commands without verification. Additionally:

- Before each replacement, the editor moves the cursor after the found search string and displays that logical line as the first line of the text window.
- A prompt question appears in the error window

  R Signifies replacement of the search string
  S Signals a "skip" of this occurrence
  Q Terminates or prematurely "quits" the search and replace command.

You may type your response in upper- or lowercase letters. If the response is valid, the editor clears the error window and completes the operation. If the response is invalid, your typed character is displayed; the cursor appears in the error window with a question mark.

BLOCK COMMANDS

You can manipulate a section of text lines by placing them within a defined **block**. To do this, you must precede and follow the designated text with a **block marker** that flags the attention of the editor and signals the beginning and end of the block. In the case of having more than two markers, the block is defined to be the group of text between the first encountered set of markers within the buffer.

Note: Do not use a line within your file that matches the block marker text designation.

Block markers are:

- A special text line displayed as follows

  that must be the **Only** text on the line itself
- Converted to a regular text line in the file by adding, deleting, or changing characters within the marker
- Automatically deleted from any text written out of the buffer

Although block commands offer timely execution of lengthy procedures, consider the limitations imposed upon their function by the system, itself. For example, error conditions can result if you attempt to move blocked text from the top of memory through insufficient available RAM. Also, exercise caution when you assign a filename specification within the parameters of a block-read or block-write operation so that you do not attempt to read or write to an already open file. Remember that the .BAK and .TMP file extensions are reserved for internal use by the editor. Also, if you wish to specify a drive number within a block-read or block-write operation, use the drive number D***n*** designation within your filename string.

Command		Explanation
MS	Marker Set	Marker Set Inserts a block-marker text line **Before** the logical line containing the cursor
MC	Marker Clear	Marker Clear Removes all block-marker text lines and repositions the cursor to the beginning of the buffer

After setting the block markers, use the following commands to perform your intended operation.

Command		Explanation
BC	Block Copy	Copies the marked text before the line on which the cursor is positioned. The block markers are not copied with the text.
BM	Block Move	Moves a marked block of text before the logical line containing the cursor. The block markers are also moved.
BD	Block Delete	Deletes a marked block of text. The block markers are also deleted.
BP	Block Print	Prints the marked block on the system printer (P:). Expanding tabs and carriage returns are displayed as blanks.
BW/-/	Block Write	Writes the marked block to a disk file named within the delimiters. The block markers are not written to the file.
BR/-/	Block Read	Reads the disk file named within the delimiters and inserts that block before the logical line containing the cursor. Automatic paging will occur to read in the entire file if memory becomes full.

In general, the use of these commands:

- Positions the cursor at the beginning of the current line.
- Scrolls the screen until the cursor is on the first line of the text window.

Error messages that could be generated from an attempt of the above commands are:

MEMORY FULL	Results if there is not enough free memory to hold the entire block on a move or copy command.

Procedure for recovery from this condition is to:

- Use a BW/-/ command
- Position the cursor at the desired location for the block operation
- Use a BR/-/ command

An alternate recovery method is to:

- Use the REOPEN command
- Reposition the cursor at the desired location for the block operation
- Repeat the block command

I/O ERROR ***nnn***

May result during a print or write command. A standard ATARI operating system error number is given to aid you in isolating the problem.

In a print operation, the editor:

- Aborts the command line
- Returns to immediate mode operation.

In a write operation, the editor: closes the file.

INSERTING AND DELETING COMMANDS

Command	Explanation
IT/-/***n***	Inserts text string at the cursor location ***n*** times. If the cursor is past the last line in the buffer, the editor inserts a carriage return to the right of the cursor before inserting the text.
DB***n***	Deletes ***n*** characters before the cursor.
DA***n***	Deletes ***n*** characters after the cursor.
DF***n***	Deletes every character between the beginning of the logical line and the current cursor location. When the cursor position is immediately past a carriage return, the entire logical line is deleted except for the carriage return, itself. After this occurrence, the cursor moves to the beginning of this null line.

DL*n*	Deletes the logical line containing the cursor. After deletion the cursor moves before the first character of the next logical line.
RL	Inserts the text stored in the "recover-line" buffer in front of the line containing the cursor. Use this command to recover from accidental deletion of a line or to achieve a simple one-line move. You can insert text into the recover-line buffer by using a command or an immediate keystroke to delete a logical line.

Note: The notation ***n*** signifies an optional numeric argument, which usually acts as a repeat counter, with a range of 1-65535. With the exception of margin values, if ***n*** is omitted, the editor assumes a value of 1.

Error messages that could be generated from an attempt to use the above commands are:

MEMORY FULL	Results if too little free memory exists to allow for complete input of the string argument. Result of Operation: • Inserts either none, or only a part, of the string • Aborts the command line • Returns to immediate mode operation
LINE TOO LONG	Results from a deletion command if the editor deletes a carriage return and attempts to concatenate lines that will exceed the current line length limits. Also, this error condition results from text string insertion that causes maximum line length limits to be exceeded.
CURSOR AT END	Results from a deletion command if the cursor is at the **beginning** of the buffer when the editor attempts a deletion of characters **before** the cursor or if the cursor is at the **end** of the buffer when the editor attempts a deletion of characters **after** the cursor.

Note: To delete the last carriage return in the buffer, use the delete-line command.

SPECIALIZED COMMANDS

LM*n* and **RM*n***: Left and Right Margin Set Commands. If your television set needs adjustment to avoid cutting columns off of the display, change the left and right margins respectively by using these commands. Both margins are set a designated number of spaces dependent upon the value of ***n***. If you omit the designation for ***n***, the editor assumes a value of 1 for the left margin and a value of 40 for the right margin. The rule for setting the margin values is that the left margin must be greater than or equal to 1, but less than the value of the right margin. The right margin must be less than or equal to 40, but greater than the value of the left margin.

If you attempt a designation for ***n*** that is not in conformance with the margin rule, the editor generates the error message MARGIN VALUE ERROR, aborts the command line, and returns to immediate mode operation. This error condition also occurs if a new margin value causes existing command lines to exceed margin boundaries. Set automatic default values for both margins by using the customizing file.

CTS*n*: Convert Tabs to Spaces Command. Use this command to convert expanding tabs into spaces for a specified ***n*** of logical lines. If you omit the designation for ***n***, the editor assumes a value of 1. Error conditions can occur in two instances:

MEMORY FULL	This error is generated when the editor runs out of free memory during the conversion. A partially converted line may appear above the line that is being executed at the time of the error condition.
CURSOR AT END	This error is generated when the editor runs out of lines to convert in the buffer.

Error conditions cause the editor to abort the command line and return to immediate mode operation.

REOPEN: Reopen Editor With Same File. Use the REOPEN command to exit normally from the editor. The editor automatically reenters the same file, retains the original command line, and positions the cursor to the beginning of the file. Minimum growth factor determinations are made by the editor. The editor displays a warning message if the recalculated disk free space shows a limitation. You can choose to leave the editor or ignore the warning and continue with your editing session. When you reenter, the editor ignores all commands past the REOPEN on the current command line and empties both command line entries.

Use this command as a safety factor and backup procedure. Consistent and frequent implementation of the REOPEN command assures you the retention of your most current work in the event of an unforeseeable occurrence such as a power failure. Fifteen-minute interval "saves" are a common data processing practice.

Note: If you are using more than one disk drive, the editor switches source and destination drives each time you execute the REOPEN command.

PL*n*: Print ***n*** Lines on the System Printer. Use this command to print a specified number of lines on the system printer (P:). If ***n*** is not assigned, the editor assumes a value of 1. If you assign a value to ***n*** that is larger than the number of lines currently residing in the buffer, the editor automatically writes out the buffer and reads in a new one. If the editor encounters an end-of-file before the assigned number of ***n*** lines has been printed, the CURSOR AT END error message results. The editor aborts the command line and returns to immediate mode operation.

Printing starts from the logical line containing the cursor. Before printing the lines, all carriage returns and tab fields are changed to blanks.

Cursor positioning remains stationary unless the buffer is written out. The cursor moves to the beginning of any newly read buffer.

WL/-/*n*: Write ***n*** Lines to Disk File. Use this command to write a specified number of lines to the disk file designated within the delimiters. If ***n*** is not assigned, the editor assumes a value of 1. If you assign a value to ***n*** that is larger than the number of lines currently residing in the buffer, the editor automatically writes out the buffer and reads in a new one. If the editor encounters an end-of-file before the assigned number of ***n*** lines has been written, the CURSOR AT END error message results. The editor aborts the command line and returns to immediate mode operation.

Writing starts from the logical line containing the cursor. Cursor positioning remains stationary unless the buffer is written out. The cursor moves to the beginning of any newly read buffer.

Caution: Remember the editor reserves .BAK and .TMP extender designations. Do not attempt a write or read operation to an already open file.

LARGE FILE COMMANDS

You can edit a file that is too large to fit into available free RAM space by using two specialized commands formulated specifically for this purpose.

IH inputs half the available RAM from the file
OC outputs text up to the current position of the cursor

When the editor receives the IH command, its immediate response is to calculate available memory and input approximately half of that amount from the file into the buffer. After receiving the OC command, the editor outputs text from the beginning of the buffer up to the logical line containing the cursor. Thereafter, that logical line becomes the first line in the buffer. With combined use of these two commands, you can obtain free memory to successfully edit files larger than will fit into current memory. Error or warning conditions that can occur include:

INPUT EOF	The editor reaches the end of the specified input file.
I/O ERROR ***nnn***	A fatal disk or printer error occurs.
LINE TOO LONG	The editor encounters a line that exceeds the maximum line length set by the customizing file.

CANNOT-PREVIOUS DISK I/O ERROR	The editor cannot perform an intended function because of a previous error condition.

TABLE 1 — IMMEDIATE MODE RESERVED KEYSTROKES

CTRL ←	Move cursor left (skip across expanding tabs)
CTRL →	Move cursor right (skip across expanding tabs)
CTRL ↓	Move cursor down one physical line
CTRL ↑	Move cursor up one physical line
CTRL 2	Move cursor to beginning of logical line
CTRL 3	Move cursor to end of logical line
CTRL 8	Display previous screen of characters
CTRL 9	Display next screen of characters
regular keys	Insert character into text
SHIFT INSERT	Prepare to insert new line(s)
TAB	Tab to next tab stop
CTRL RETURN	Return with auto indent to same level
DELETE BACK S	Delete character left of cursor
CTRL DELETE BACK S	Delete character right of cursor
SHIFT DELETE BACK S	Delete logical line containing cursor
CTRL TAB	Toggle visible-tab mode (if expanding tab option selected)
SHIFT TAB	Toggle visible-carriage return mode
SHIFT CLEAR	Clear error window
START	Execute command window
SELECT	Select alternate command line
OPTION	Change mode
BREAK	Abort command being executed

TABLE 2 — COMMAND MODE INSTRUCTIONS

EXIT	Exit normally from edit - return to DOS
EXIT2	Exit normally from edit - restart editor
ABORT	Exit without saving changes - return to DOS
ABORT2	Exit without saving changes - restart editor
SB/-/*n*	Search for *n*th occurrence of string in buffer
SF/-/*n*	Search for *n*th occurrence of string in file
SRB/-/-/*n*	Search and replace *n* times in buffer
SRF/-/-/*n*	Search and replace *n* times in file
SRVB/-/-/*n*	Search and replace with verify *n* times in buffer
SRVF/-/-/*n*	Search and replace with verify *n* times in file
MS	Marker set
MC	Marker clear
BC	Block copy
BM	Block move
BD	Block delete
BP	Block print
BW/-/	Block write to disk file
BR/-/	Block read from disk file
CL*n*	Move cursor left *n* characters
CR*n*	Move cursor right *n* characters
CU*n*	Move cursor up *n* logical lines
CD*n*	Move cursor down *n* logical lines
CBB	Move cursor to beginning of buffer
CEB	Move cursor to end of buffer
CBF	Move cursor to beginning of file
CEF	Move cursor to end of file
CBL	Move cursor to beginning of logical line
CEL	Move cursor to end of logical line
CC*n*	Move cursor to column *n*
IT/-/*n*	Input string *n* times at cursor position
DB*n*	Delete *n* characters before cursor
DA*n*	Delete *n* characters after cursor
DF	Delete first part of logical line
DR	Delete remainder of logical line
DL*n*	Delete *n* logical lines
RL	Recover last deleted line
IH	Input half of available RAM from file
OC	Output text to file up to line containing cursor

REOPEN	Reopen editor with same file
PL*n*	Print *n* lines on system printer
WL/-/*n*	Write *n* lines to disk file
CTS*n*	Convert expanding tabs to spaces for *n* lines
LM*n*	Set left margin to width *n*
RM*n*	Set right margin to width *n*

Note: *n* is an optional numeric argument, which usually acts as a repeat counter, with a range of 1-65535. With the exception of margin values, if *n* is omitted, the editor assumes a value of 1.

Note: *"/-/"* is a required character string delimited by either a pair of slashes or a pair of quotes. *"/-/-/"* is a pair of required strings delimited by either a triplet of slashes or a triplet of quotes.

3

CUSTOMIZING THE EDITOR

You can use the editor to full advantage by establishing specific parameters to handle distinct file extensions. For example, you may wish to turn off the auto-indention feature on all file extensions except for languages similar to PASCAL. Maximum line lengths for .ASM files are different than, for instance, .BAS and should be altered from the default value. By setting a customizing screen color you can visually determine the nature of your editing file.

Customizing file alterations use the BASIC programming language. You must have an ATARI BASIC language cartridge inserted into the left slot of your computer console. Refer to the *ATARI 800 Operators Manual* for instruction in installing a cartridge.

To load the customizing file:

1. Place the diskette containing the editor program into your disk drive.
2. Turn on the computer. Wait for the READY message prompt with the cursor to appear on the screen.
3. Type **RUN "D:MEDITCM.BAS"** and press RETURN.
4. Remove the program diskette and insert your data diskette.

The Customizing File Menu that appears will allow you to select the area in which you wish to change the default values. Most of the selections are self-documented. You can reference the instructions included in the software program or you can type **N** in response to the WOULD YOU LIKE INSTRUCTIONS? (Y/N) query and use this manual.

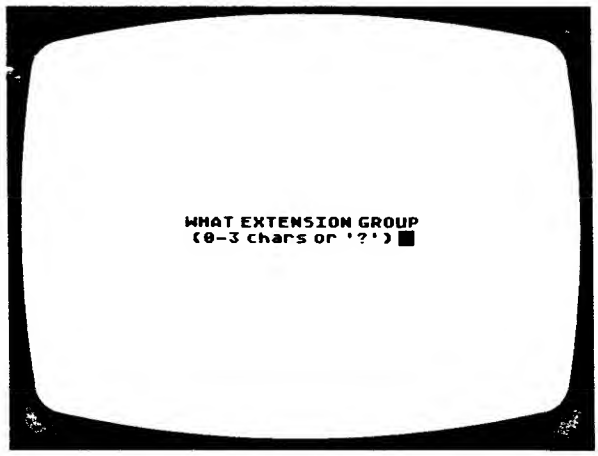


Figure 10 Extension Group Prompt

Refer to Figure 11. By answering the WHAT EXTENSION GROUP query, you establish the filename specification extension that you wish to customize. Enter the [?] to return to the instructions for use of the file.

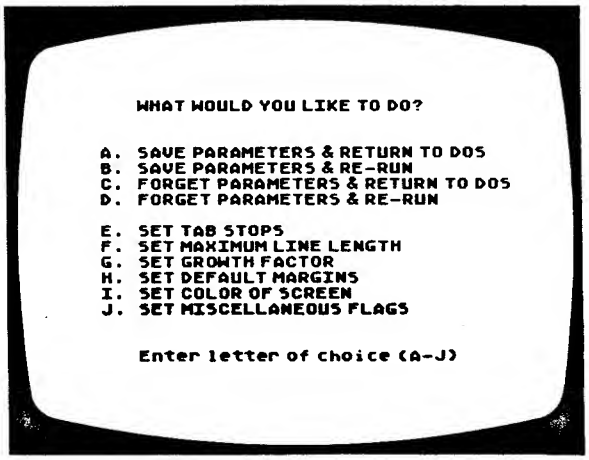


Figure 11 Customizing File Menu

A-D—Parameters

The Customizing File Menu appears as soon as you have answered the extension group prompt. Depending upon your choice of parameters, all changes that you enter into the customizing file will be retained as new values for your selected group. Use the first four fields of the menu, A-D, to establish the changes or to disregard them. Selection of **A** or **C** returns control to DOS for easy access into the editor. Selection of **B** or **D** reruns the customizing file.

E—Set Tab Stops

Selection **E** allows you to set your tab stop values. As the software instructions indicate, tab stop values cannot be changed during an editing session. The screen displays default and current tab stop values. A (Menu, Set, Clear) Select Item prompt appears on the screen.

M Reruns the Customizing File Menu

S Brings **(2-199) What column to set** onto the screen. Choose the column tab stop by pressing the number combination followed by RETURN. All current tab stop values will be redisplayed. Note the inclusion of your new value.

C Brings **(2-199 or *) What column to clear** onto the screen. Choose the column tab stop by pressing the number combination followed by RETURN. All current tab stop values will be redisplayed. Note the exclusion of your new value.

Press the "*" key to clear all tab stop values. Wait for the Select-Item prompt to appear. Use the Set command to enter new values.

F—Set Maximum Line Length

Maximum line length defaults to 114 characters or 3 physical lines in conformance with the ATARI Computer's built-in operating system screen editor. The editor allows from 2 to 200 characters per logical line. Enter your chosen value and press RETURN. Control automatically returns to the Customizing File Menu.

G—Set Minimum Growth

Use this command to determine your space allocation before receiving an I/O ERROR 162 (disk full) error message. You can ignore the minimum growth check warning and proceed with your editing session. However, be mindful of its usefulness as a warning device. Enter your chosen value and press RETURN. Control automatically returns to the Customizing File Menu.

H—Set Default Margins

If display columns are being cut off at the sides of your television screen, you can change the left and right margins.

I—Set Color of Screen

Using the customizing file, you can alter three variables that precisely determine the color display. The first variable, indicated as COLOR, controls the background color selection. Refer to the following table for numbers corresponding to the color of your choice.

TABLE 3—THE ATARI COLORS AND NUMBERS

BACKGROUND COLORS	CORRESPONDING NUMBERS
GRAY	0
LIGHT ORANGE (GOLD)	1
ORANGE	2
RED-ORANGE	3
PINK	4
PURPLE	5
PURPLE-BLUE	6
AZURE BLUE	7
SKY BLUE	8
LIGHT BLUE	9
TURQUOISE	10
GREEN-BLUE	11
GREEN	12
YELLOW-GREEN	13
ORANGE-GREEN	14
LIGHT ORANGE	15

Note: Colors will vary with type and adjustment of television or monitor used.

The second variable, B-lum, controls the luminance of the background color on the screen. The third variable, C-lum, controls the character luminance. Luminance is changed on every **even** number: 0, 2, 4, 6, 8, 10, 12, and 14. Follow certain rules when assigning luminance numbers to ensure a useable combination. To obtain the best clarity and avoid the occurrence of a blank screen:

- Do not equate the luminance values for the two variables, B-lum and C-lum.
- The two luminance values must be greater or less than each other by a factor of 8.

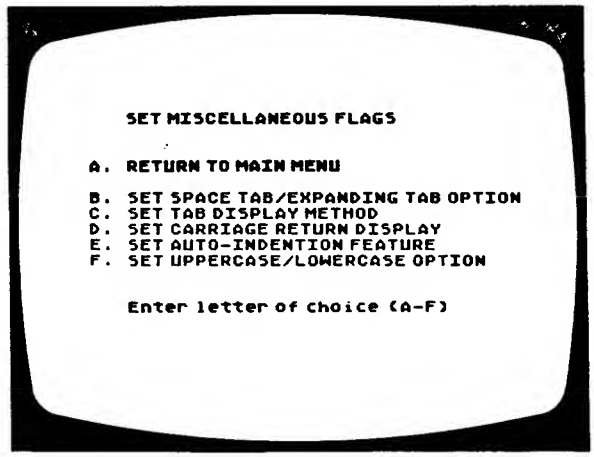


Figure 12 Customizing File Submenu J

J—Set Miscellaneous Flags

A—Return to Main Menu

Return to the main menu after choosing your new values. You may then make a selection to retain or disregard the parameters you have selected.

B—Set Type of Tab

Note: Not all ATARI software recognizes expanding tabs.

Space tabs insert a selected number of blanks between tab stops, and the cursor positions accordingly. Expanding tabs, however, insert a character into the text that indicates the tab function.

C—Set Tab Display Method

Expanding tabs can be conventionally displayed as spaces or usefully displayed as right triangles followed by periods. The value entered into this parameter can be displaced by an immediate mode keystroke.

D—Set Carriage Return Display

A carriage return can either be displayed as a space or a down arrow. The value entered into this parameter can be displaced by an immediate mode keystroke.

E—Auto-Indention Feature

Auto-indention allows you to reposition the cursor to an automatic tab stop on the next logical line. To activate auto-indention, you press the CTRL and RETURN keys simultaneously. Use the customizing file to disengage this feature.

F—Set Shifting Caselock

After you answer the filename prompt and begin the edit of your specified file, this option comes into effect. Set a shift-lock for uppercase designation or a no-lock for upper- and lowercase. The parameter value entered may be displaced by using the CAPS LOWR key during an editing session.

EDITOR MESSAGES

Warnings

USING DEFAULTS	No customizing file was found that matched the extension of the filename, so the editor uses its built-in defaults.
NEW FILE	The file named to be edited does not exist; therefore, the editor creates a new file using the specified name given at the prompt.
INPUT EOF	The end of file has been reached on the input file.
CANNOT-PREVIOUS DISK I/O ERROR	Refer to a previous execution for cause of error. Use of EXIT, IH, or OC commands may be restricted.
CURSOR AT END	Occurs whenever the cursor tries to move past either end of the text buffer.

Prompt Messages

VERIFY(REPLACE, SKIP,QUIT)?	Displays in the error window before each replacement while executing a search-and-replace-with-verify command.

Error Messages

MARGIN VALUE ERROR	Occurs when a designation for ***n*** is not in conformance with the margin rule.
LINE TOO LONG	Occurs whenever the addition of text to the current line causes it to exceed the maximum line length set by the customizing file.
MEMORY FULL	Means that there is not enough free RAM in the buffer to carry out the operation.
ILLEGAL DEV:FILE.EXT	Tells you that the last filename prompt was incorrectly answered.
DELIMITER ERROR	Tells you that the command being entered into the command window requires a slash (/) or double quotation mark (") for proper syntax.
SEARCH FAILED	Occurs when a search command was executed and the search string could not be found.
NOT COMPLETE	Occurs when you try to execute the command window when an incomplete command line exists there.
UNRECOGNIZED COMMAND	Occurs when you type an invalid character into the command window.
BREAK KEY ABORT	Acknowledges that you have pressed the BREAK key during execution of the command window.
I/O ERROR ***nnn***	Tells you that a fatal disk or printer error has occurred. ***nnn*** is an error number generated by the operating system. Refer to the *ATARI Disk Operating System II Reference Manual*.
NUMBER TOO BIG	Tells you that the argument ***n*** given in the command window is too large for the command specified or the current line length limit.
CANNOT FIND MARKED BLOCK	Means that the editor could not find a marked block of text while executing a BC, BD, BM, BP, BW/-/, or BR/-/ command.
CANNOT FIND FILE	Means that the editor could not find the file requested in a BR/-/ command.
EDITOR IS CONFUSED	Occurs when internal editing pointers have been damaged. Try immediate mode keystrokes CTRL 2 and CTRL ← until you no longer receive this error message. (If this error should occur, it would be helpful to us if you could find a repeatable sequence of events that reproduces it and report to ATARI Customer Service.)
FILE LOCKED	Means that the file you requested to edit is locked or the associated .BAK or .TMP file is locked.
EDITOR CANNOT RUN-NO FREE IOCBs	Occurs if you have attempted to use any other DOS but 2.0S; or if you have called the editor directly, and at least three available IOCBs do not exist.

Note: ***n*** is an optional numeric argument, which usually acts as a repeat counter, with a range of 1-65535. With the exception of margin values, if ***n*** is omitted, the editor assumes a value of 1.

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We, Atari, Inc., guarantee to you, the original retail purchaser, that the medium on which the APX program is recorded and any hardware accessories sold by APX are free from defects for thirty days from the date of purchase. Any applicable implied warranties, including warranties of merchantability and fitness for a particular purpose, are also limited to thirty days from the date of purchase. Some states don't allow limitations on a warranty's period, so this limitation might not apply to you. If you discover such a defect within the thirty-day period, call APX for a Return Authorization Number, and then return the product along with proof of purchase date to APX. We will repair or replace the product at our option.

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ATARI PROGRAM EXCHANGE

REVIEW FORM

We're interested in your experiences with APX programs and documentation, both favorable and unfavorable. Many software authors are willing and eager to improve their programs if they know what users want. And, of course, we want to know about any bugs that slipped by us, so that the software author can fix them. We also want to know whether our documentation is meeting your needs. You are our best source for suggesting improvements! Please help us by taking a moment to fill in this review sheet. Fold the sheet in thirds and seal it so that the address on the bottom of the back becomes the envelope front. Thank you for helping us!

1. Name and APX number of program _____

2. If you have problems using the program, please describe them here.

_____

_____

_____

3. What do you especially like about this program?

_____

_____

_____

4. What do you think the program's weaknesses are?

_____

_____

_____

5. How can the catalog description be more accurate and/or comprehensive?

_____

_____

6. On a scale of 1 to 10, 1 being "poor" and 10 being "excellent", please rate the following aspects of this program?

_____ Easy to use
_____ User-oriented (e.g., menus, prompts, clear language)
_____ Enjoyable
_____ Self-instructive
_____ Useful (non-game software)
_____ Imaginative graphics and sound

7. Describe any technical errors you found in the user instructions (please give page numbers).

8. What did you especially like about the user instructions?

9. What revisions or additions would improve these instructions?

10. On a scale of 1 to 10, 1 representing "poor" and 10 representing "excellent", how would you rate the user instructions and why?

11. Other comments about the software or user instructions:

STAMP

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[seal here]